Accepted Manuscript

Relative Tectonic Activity Assessment and Kinematic Analysis of the North Bozgush Fault Zone, NW Iran

Reza Saber, Ayse Çaglayan, Veysel Isik

PII: S1367-9120(18)30246-3

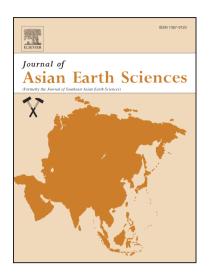
DOI: https://doi.org/10.1016/j.jseaes.2018.06.023

Reference: JAES 3553

To appear in: Journal of Asian Earth Sciences

Received Date: 22 November 2017

Revised Date: 9 May 2018 Accepted Date: 10 June 2018



Please cite this article as: Saber, R., Çaglayan, A., Isik, V., Relative Tectonic Activity Assessment and Kinematic Analysis of the North Bozgush Fault Zone, NW Iran, *Journal of Asian Earth Sciences* (2018), doi: https://doi.org/10.1016/j.jseaes.2018.06.023

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

CCEPTED MANUSCRIPT

Relative Tectonic Activity Assessment and Kinematic Analysis of the North Bozgush Fault

Zone, NW Iran

Reza Saber*,a, Ayse Çaglayana,b, Veysel Isika

^aAnkara University, Department of Geological Engineering, Tectonics Research Group, TR-

06830, Ankara, Turkey

^bMinistry of Environment and Urbanization, General Directorate of Spatial Planning,

Department of Geological Survey, TR-06520, Ankara, Turkey

*Corresponding author:

E-mail address: rsaber@ankara.edu.tr (R. Saber)

Abstract

NW Iran is among the most interesting and complex areas within Arabian-Eurasia collision

zone. Historical and instrumental earthquake records in this region indicate that active faults

have the potential to produce serious seismic hazards in the future. The North Bozgush Fault

Zone, an anastomosing fault zone, consists of several parallel and sub-parallel faults which

have developed in a right lateral strike-slip system with a reverse component. Our structural

analysis shows that faulting occurs along a strong dominant compressional strike-slip regime

and is predominantly related to NW-SE shortening along the zone.

This paper represents an analysis of the morphometric indices to depict the tectonic activity

of the northern part of the Bozgush Mountains, an area with a typical tectono-morphology.

The result of the morphometric analysis shows that relative tectonic activity along the North

Bozgush Fault Zone decreases significantly from west to east. Measured uplift rates show

that the uplift rate is higher than 0.5 mm/yr in the western and central parts and decreases

1

Download English Version:

https://daneshyari.com/en/article/8913813

Download Persian Version:

https://daneshyari.com/article/8913813

Daneshyari.com